



# Electric Program Investment Charge

## First Triennial Investment Plan Development

August 9, 2012

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California Energy Commission



## Overview

- Workshop purpose
  - Solicit broad public input on investment plan
- Investment Plan development process
  - Open and transparent
  - Public workshops
  - Written comments
- Investment Plan expected outcome
  - Develop a robust program that accelerates clean energy innovation and deployment in California; is synergistic with other public and private initiatives; and provides high value back to utility customers



## Agenda Review

### Day 1: Clean Energy Innovation Priorities

- Overview of CPUC EPIC Decision
- Outline process for CEC/IOU plan development
- Discussion Sessions to provide input on program topics (efficiency, generation & grid-related)

### Day 2: Panels on Market Deployment & Facilitation to Accelerate Clean Tech Deployment

- Energy innovation clusters
- Regulatory assistance & permit streamlining
- Workforce development



## Schedule for Investment Plan Approval

Activity	First Triennial Investment Plan (covering 2012-2014)
Northern CA scoping workshops	August 2-3, 2012
Southern CA scoping workshops	August 9-10, 2012
Propose Investment Plan to stakeholders	September 2012
CEC adopts Investment Plan at Business Meeting	Late October 2012
Submit Investment Plan to CPUC	November 1, 2012
CPUC proceeding	December 2012 – April 2013
CPUC Decision adopting or modifying Investment Plans	May 2013



## ENERGY INNOVATION PIPELINE

### APPLIED RESEARCH AND DEVELOPMENT

CEC- \$55 million/year

Pre-commercial development  
Lab-scale demonstration  
Pilot-scale demonstration

### TECHNOLOGY DEMONSTRATION AND DEPLOYMENT

CEC - \$45 million/year  
IOUs - \$30 million/year

Pre-commercial demonstration  
Pre-commercial deployment

### MARKET FACILITATION

CEC - \$15 M/year

Regulatory assistance  
Workforce development  
Education and outreach  
Program tracking  
Market research



## For more information

EPIC Website:

<http://www.energy.ca.gov/research/epic>

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# Topics and Schedule for Discussion Sessions

August 9, 2012

Garry O'Neill

Efficiency and Renewable Energy Division  
California Energy Commission



## Discussion Sessions

- 11:00 Session 1: Clean Energy Generation**
- 1:15 Session 2: Grid Operations, T&D, and Electric Vehicles**
- 2:30 Session 3: Efficiency and Demand-side Management**
- 3:45 Public Comment**
- 4:15 Summary Remarks for Day 1**



## Purpose of Discussion Sessions

- Gather stakeholder input on investment areas and specific initiatives
- Provide feedback on proposed technology, resource, and strategy topic areas
- Prioritize investment topics
- Identify ways the Energy Commission can coordinate with organizations to leverage other efforts as well as avoid duplication

## Discussion Session Expectations

- Speakers should identify their names and affiliation
- Speakers are limited to 3 minutes at a time
- Comments should be limited to the scope of CPUC EPIC decision
- Any additional input should be submitted in written comments by 8/17/12.



# Clean Energy Generation Systems

## Topics:

- Energy Smart Communities
- Distributed Generation
- Utility Scale Generation
- Environment and Public Health
- Market Facilitation
- Others?



# Grid Operations, T&D, and Electric Vehicles

## Topics:

- Smart Grid/Microgrids
- Electric vehicle charging and grid integration
- Electric vehicle efficiency and battery reuse
- Storage (including ancillary services)
- Renewable integration into the grid
- Grid system monitoring, controls and analysis
- HANs and related technologies
- Others?



# Efficiency and Demand-side Management

## Topics:

- Building End-use Energy Efficiency
- Zero Net Energy Buildings
- Industrial, Agriculture, and Water End-use Energy Efficiency
- Demand Response
- Demand-side storage
- Energy efficiency-related environmental/public health impacts
- Others?